

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/JP2004/016920

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H01L21/311

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal, PAJ, WPI Data, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 511 608 B1 (MORI MASAHITO ET AL) 28 January 2003 (2003-01-28) the whole document	1-12
X	US 6 197 151 B1 (OTSUBO TORU ET AL) 6 March 2001 (2001-03-06) column 12, line 25 - column 4; figure 1 column 19, line 58 - column 22 column 27, line 10 - line 21; figure 30 ----- -/--	1-12

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

19 January 2005

Date of mailing of the international search report

02/02/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Szarowski, A

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/016920

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	MIYATA K ET AL: "CF <sub>x</sub> (X=1-3) radical measurements in ECR etching plasma employing C <sub>4</sub> F <sub>8</sub> gas by infrared diode laser absorption spectroscopy" JAPANESE JOURNAL OF APPLIED PHYSICS, PART 2 (LETTERS) JAPAN, vol. 34, no. 4A, April 1995 (1995-04), pages L444-L447, XP002314120 ISSN: 0021-4922 abstract	1-12
A	EP 0 777 267 A (APPLIED MATERIALS INC) 4 June 1997 (1997-06-04) column 7 - column 8, line 3; figure 2	1-12
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 10, 31 August 1999 (1999-08-31) -& JP 11 145118 A (NEC CORP), 28 May 1999 (1999-05-28) cited in the application abstract paragraph '0013!; figure 1	1-12

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/016920

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6511608	B1	28-01-2003	US 2003098288 A1	29-05-2003
			JP 10242130 A	11-09-1998
			JP 2003264183 A	19-09-2003
			TW 473857 B	21-01-2002
			TW 487983 B	21-05-2002
			US 6136214 A	24-10-2000
US 6197151	B1	06-03-2001	EP 0793254 A2	03-09-1997
			JP 3499104 B2	23-02-2004
			JP 10261498 A	29-09-1998
			JP 2003077903 A	14-03-2003
			JP 2003077904 A	14-03-2003
			JP 2004349717 A	09-12-2004
			SG 68611 A1	16-11-1999
			US 2002069971 A1	13-06-2002
			US 2004178180 A1	16-09-2004
			US 6129806 A	10-10-2000
EP 0777267	A	04-06-1997	EP 0777267 A1	04-06-1997
			JP 9172005 A	30-06-1997
			US 5880037 A	09-03-1999
			US 6184150 B1	06-02-2001
JP 11145118	A	28-05-1999	NONE	